



IFWP

RAW SEQUENCE LISTING DATE: 12/29/2005
 PATENT APPLICATION: US/10/561,487 TIME: 15:03:40

Input Set : A:\66168-03 Sequence Listing.txt
 Output Set: M:\CRF4\12292005\J561487.raw

3 <110> APPLICANT: The Government of the United States of America as
 4 represented by the Secretary of the Department of Health and
 5 Human Services
 6 Drayna, Dennis
 7 Kim, Un-kyung
 9 <120> TITLE OF INVENTION: VARIANTS OF HUMAN TASTE RECEPTOR GENES
 11 <130> FILE REFERENCE: 4239-66168-03
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/561,487
 C--> 13 <141> CURRENT FILING DATE: 2005-12-19
 13 <150> PRIOR APPLICATION NUMBER: PCT/US2004/019489
 14 <151> PRIOR FILING DATE: 2004-06-18
 16 <150> PRIOR APPLICATION NUMBER: US 60/480,035
 17 <151> PRIOR FILING DATE: 2003-06-19
 19 <160> NUMBER OF SEQ ID NOS: 264
 21 <170> SOFTWARE: PatentIn version 3.2
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 900
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Homo sapiens
 29 <220> FEATURE:
 30 <221> NAME/KEY: CDS
 31 <222> LOCATION: (1)..(900)
 33 <220> FEATURE:
 34 <221> NAME/KEY: variation
 35 <222> LOCATION: (332)..(332)
 36 <223> OTHER INFORMATION: r is g or a
 38 <220> FEATURE:
 39 <221> NAME/KEY: variation
 40 <222> LOCATION: (616)..(616)
 41 <223> OTHER INFORMATION: y is t or c
 43 <400> SEQUENCE: 1
 44 atg cta gag tct cac ctc att atc tat ttt ctt ctt gca gtg ata caa 48
 45 Met Leu Glu Ser His Leu Ile Ile Tyr Phe Leu Leu Ala Val Ile Gln
 46 1 5 10 15
 48 ttt ctt ctt ggg att ttc aca aat ggc atc att gtg gtg gtg aat ggc 96
 49 Phe Leu Leu Gly Ile Phe Thr Asn Gly Ile Ile Val Val Val Asn Gly
 50 20 25 30
 52 att gac ttg atc aag cac aga aaa atg gct cgg ctg gat ctc ctt ctt 144
 53 Ile Asp Leu Ile Lys His Arg Lys Met Ala Pro Leu Asp Leu Leu Leu
 54 35 40 45
 56 tct tgt ctg gca gtt tct aga att ttt ctg cag ttg ttc atc ttc tac 192
 57 Ser Cys Leu Ala Val Ser Arg Ile Phe Leu Gln Leu Phe Ile Phe Tyr
 58 50 55 60

Does Not Comply
 Corrected Diskette Needed

pp 1,6

?
 'C' is at 6/6 (p.2)

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60 gtt aat gtg att gtt atc ttc ttc ata gaa ttc atc atg tgt tct gcg      240
61 Val Asn Val Ile Val Ile Phe Phe Ile Glu Phe Ile Met Cys Ser Ala
62 65      70      75      80
64 aat tgt gca att ctc tta ttt ata aat gaa ttg gaa ctt tgg ctt gcc      288
65 Asn Cys Ala Ile Leu Leu Phe Ile Asn Glu Leu Glu Leu Trp Leu Ala
66      85      90      95
68 aca tgg ctc ggc gtt ttc tat tgt gcc aag gtt gcc agc gtc crt cac      336
69 Thr Trp Leu Gly Val Phe Tyr Cys Ala Lys Val Ala Ser Val Xaa His
70      100      105      110
72 cca ctc ttc atc tgg ttg aag atg agg ata tcc aag ctg gtc cca tgg      384
73 Pro Leu Phe Ile Trp Leu Lys Met Arg Ile Ser Lys Leu Val Pro Trp
74      115      120      125
76 atg atc ctg ggg tct ctg cta tat gta tct atg att tgt gtt ttc cat      432
77 Met Ile Leu Gly Ser Leu Leu Tyr Val Ser Met Ile Cys Val Phe His
78      130      135      140
80 agc aaa tat gca ggg ttt atg gtc cca tac ttc cta agg aaa ttt ttc      480
81 Ser Lys Tyr Ala Gly Phe Met Val Pro Tyr Phe Leu Arg Lys Phe Phe
82 145      150      155      160
84 tcc caa aat gcc aca att caa aaa gaa gat aca ctg gct ata cag att      528
85 Ser Gln Asn Ala Thr Ile Gln Lys Glu Asp Thr Leu Ala Ile Gln Ile
86      165      170      175
88 ttc tct ttt gtt gct gag ttc tca gtg cca ttg ctt atc ttc ctt ttt      576
89 Phe Ser Phe Val Ala Glu Phe Ser Val Pro Leu Leu Ile Phe Leu Phe
90      180      185      190
92 gct gtt ttg ctc ttg att ttc tct ctg ggg agg cac acc cgg gaa atg      624
93 Ala Val Leu Leu Leu Ile Phe Ser Leu Gly Arg His Thr Arg Gln Met
94      195      200      205
96 aga aac aca gtg gcc gcc agc agg gtt cct gcc agg ggt gca ccc atc      672
97 Arg Asn Thr Val Ala Gly Ser Arg Val Pro Gly Arg Gly Ala Pro Ile
98      210      215      220
100 agc gcg ttg ctg tct atc ctg tcc ttc ctg atc ctc tac ttc tcc cac      720
101 Ser Ala Leu Leu Ser Ile Leu Ser Phe Leu Ile Leu Tyr Phe Ser His
102 225      230      235      240
104 tgc atg ata aaa gtt ttt ctc tct tct cta aag ttt cac atc aga agg      768
105 Cys Met Ile Lys Val Phe Leu Ser Ser Leu Lys Phe His Ile Arg Arg
106      245      250      255
108 ttc atc ttt ctg ttc ttc atc ctt gtg att ggt ata tac cct tct gga      816
109 Phe Ile Phe Leu Phe Phe Ile Leu Val Ile Gly Ile Tyr Pro Ser Gly
110      260      265      270
112 cac tct ctc atc tta att tta gga aat cct aaa ttg aaa caa aat gca      864
113 His Ser Leu Ile Leu Ile Leu Gly Asn Pro Lys Leu Lys Gln Asn Ala
114      275      280      285
116 aaa aag ttc ctc ctc ctc agt aag tgc tgt cag tga      900
117 Lys Lys Phe Leu Leu His Ser Lys Cys Cys Gln
118      290      295
121 <210> SEQ ID NO: 2
122 <211> LENGTH: 299
123 <212> TYPE: PRT
124 <213> ORGANISM: Homo sapiens

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126 <220> FEATURE:
 127 <221> NAME/KEY: misc_feature
 128 <222> LOCATION: (111)..(111)
 129 <223> OTHER INFORMATION: The 'Xaa' at location 111 stands for Arg, or His.
 131 <400> SEQUENCE: 2
 133 Met Leu Glu Ser His Leu Ile Ile Tyr Phe Leu Leu Ala Val Ile Gln
 134 1 5 10 15
 137 Phe Leu Leu Gly Ile Phe Thr Asn Gly Ile Ile Val Val Val Asn Gly
 138 20 25 30
 141 Ile Asp Leu Ile Lys His Arg Lys Met Ala Pro Leu Asp Leu Leu Leu
 142 35 40 45
 145 Ser Cys Leu Ala Val Ser Arg Ile Phe Leu Gln Leu Phe Ile Phe Tyr
 146 50 55 60
 149 Val Asn Val Ile Val Ile Phe Phe Ile Glu Phe Ile Met Cys Ser Ala
 150 65 70 75
 153 Asn Cys Ala Ile Leu Leu Phe Ile Asn Glu Leu Glu Leu Trp Leu Ala
 154 85 90 95
 157 Thr Trp Leu Gly Val Phe Tyr Cys Ala Lys Val Ala Ser Val Xaa His
 158 100 105 110
 161 Pro Leu Phe Ile Trp Leu Lys Met Arg Ile Ser Lys Leu Val Pro Trp
 162 115 120 125
 165 Met Ile Leu Gly Ser Leu Leu Tyr Val Ser Met Ile Cys Val Phe His
 166 130 135 140
 169 Ser Lys Tyr Ala Gly Phe Met Val Pro Tyr Phe Leu Arg Lys Phe Phe
 170 145 150 155 160
 173 Ser Gln Asn Ala Thr Ile Gln Lys Glu Asp Thr Leu Ala Ile Gln Ile
 174 165 170 175
 177 Phe Ser Phe Val Ala Glu Phe Ser Val Pro Leu Leu Ile Phe Leu Phe
 178 180 185 190
 181 Ala Val Leu Leu Ile Phe Ser Leu Gly Arg His Thr Arg Gln Met
 182 195 200 205
 185 Arg Asn Thr Val Ala Gly Ser Arg Val Pro Gly Arg Gly Ala Pro Ile
 186 210 215 220
 189 Ser Ala Leu Leu Ser Ile Leu Ser Phe Leu Ile Leu Tyr Phe Ser His
 190 225 230 235 240
 193 Cys Met Ile Lys Val Phe Leu Ser Ser Leu Lys Phe His Ile Arg Arg
 194 245 250 255
 197 Phe Ile Phe Leu Phe Phe Ile Leu Val Ile Gly Ile Tyr Pro Ser Gly
 198 260 265 270
 201 His Ser Leu Ile Leu Ile Leu Gly Asn Pro Lys Leu Lys Gln Asn Ala
 202 275 280 285
 205 Lys Lys Phe Leu Leu His Ser Lys Cys Cys Gln
 206 290 295
 209 <210> SEQ ID NO: 3
 210 <211> LENGTH: 951
 211 <212> TYPE: DNA
 212 <213> ORGANISM: Homo sapiens
 215 <220> FEATURE:
 216 <221> NAME/KEY: CDS

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Input Set : A:\66168-03 Sequence Listing.txt

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217 <222> LOCATION: (1)..(951)
 219 <220> FEATURE:
 220 <221> NAME/KEY: variation
 221 <222> LOCATION: (349)..(349)
 222 <223> OTHER INFORMATION: y is t or c
 224 <220> FEATURE:
 225 <221> NAME/KEY: variation
 226 <222> LOCATION: (807)..(807)
 227 <223> OTHER INFORMATION: y is t or c
 229 <220> FEATURE:
 230 <221> NAME/KEY: variation
 231 <222> LOCATION: (852)..(852)
 232 <223> OTHER INFORMATION: y is t or c
 234 <400> SEQUENCE: 3
 235 atg atg gga ctc acc gag ggg gtg ttc ctg att ctg tct ggc act cag 48
 236 Met Met Gly Leu Thr Glu Gly Val Phe Leu Ile Leu Ser Gly Thr Gln
 237 1 5 10 15
 239 ttc aca ctg gga att ctg gtc aat tgt ttc att gag ttg gtc aat ggt 96
 240 Phe Thr Leu Gly Ile Leu Val Asn Cys Phe Ile Glu Leu Val Asn Gly
 241 20 25 30
 243 agc agc tgg ttc aag acc aag aga atg tct ttg tct gac ttc atc atc 144
 244 Ser Ser Trp Phe Lys Thr Lys Arg Met Ser Leu Ser Asp Phe Ile Ile
 245 35 40 45
 247 acc acc ctg gca ctc ttg agg atc att ctg ctg tgt att atc ttg act 192
 248 Thr Thr Leu Ala Leu Leu Arg Ile Ile Leu Leu Cys Ile Ile Leu Thr
 249 50 55 60
 251 gat agt ttt tta ata gaa ttc tct ccc aac aca cat gat tca ggg ata 240
 252 Asp Ser Phe Leu Ile Glu Phe Ser Pro Asn Thr His Asp Ser Gly Ile
 253 65 70 75 80
 255 ata atg caa att att gat gtt tcc tgg aca ttt aca aac cat ctg agc 288
 256 Ile Met Gln Ile Ile Asp Val Ser Trp Thr Phe Thr Asn His Leu Ser
 257 85 90 95
 259 att tgg ctt gcc acc tgt ctt ggt gtc ctc tac tgc ctg aaa atc gcc 336
 260 Ile Trp Leu Ala Thr Cys Leu Gly Val Leu Tyr Cys Leu Lys Ile Ala
 261 100 105 110
 263 agt ttc tct cac ycc aca ttc ctc tgg ctc aag tgg aga gtt tct agg 384
 264 Ser Phe Ser His Xaa Thr Phe Leu Trp Leu Lys Trp Arg Val Ser Arg
 265 115 120 125
 267 gtg atg gta tgg atg ctg ttg ggt gca ctg ctc tta tcc tgt ggt agt 432
 268 Val Met Val Trp Met Leu Leu Gly Ala Leu Leu Leu Ser Cys Gly Ser
 269 130 135 140
 271 acc gca tct ctg atc aat gag ttt aag ctc tat tct gtc ttt agg gga 480
 272 Thr Ala Ser Leu Ile Asn Glu Phe Lys Leu Tyr Ser Val Phe Arg Gly
 273 145 150 155 160
 275 att gag gcc acc agg aat gtg act gaa cac ttc aga aag agg agt 528
 276 Ile Glu Ala Thr Arg Asn Val Thr Glu His Phe Arg Lys Lys Arg Ser
 277 165 170 175
 279 gag tat tat ctg atc cat gtt ctt ggg act ctg tgg tac ctg cct ccc 576
 280 Glu Tyr Tyr Leu Ile His Val Leu Gly Thr Leu Trp Tyr Leu Pro Pro

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```

281          180          185          190
283 tta att gttg tcc ctg gcc tcc tac tct ttg ctc atc ttc tcc ctg ggg      624
284 Leu Ile Val Ser Leu Ala Ser Tyr Ser Leu Leu Ile Phe Ser Leu Gly
285          195          200          205
287 agg cac aca cgg cag atg ctg caa aat ggg aca agc tcc aga gat cca      672
288 Arg His Thr Arg Gln Met Leu Gln Asn Gly Thr Ser Arg Asp Pro
289          210          215          220
291 acc act gag gcc cac aag agg gcc atc aga atc atc ctt tcc ttc ttc      720
292 Thr Thr Glu Ala His Lys Arg Ala Ile Arg Ile Ile Leu Ser Phe Phe
293 225          230          235          240
295 ttt ctc ttc tta ctt tac ttt ctt gct ttc tta att gca tca ttt ggt      768
296 Phe Leu Phe Leu Leu Tyr Phe Leu Ala Phe Leu Ile Ala Ser Phe Gly
297          245          250          255
299 aat ttc cta cca aaa acc aag atg gct aag atg att ggy gaa gta atg      816
300 Asn Phe Leu Pro Lys Thr Lys Met Ala Lys Met Ile Xaa Glu Val Met
301          260          265          270
303 aca atg ttt tat cct gct ggc cac tca ttt att cty att ctg ggg aac      864
304 Thr Met Phe Tyr Pro Ala Gly His Ser Phe Ile Xaa Ile Leu Gly Asn
305          275          280          285
307 agt aag ctg aag cag aca ttt gta gtg atg ctc cgg tgt gag tct ggt      912
308 Ser Lys Leu Lys Gln Thr Phe Val Val Met Leu Arg Cys Glu Ser Gly
309          290          295          300
311 cat ctg aag cct gga tcc aag gga ccc att ttc tct tag      951
312 His Leu Lys Pro Gly Ser Lys Gly Pro Ile Phe Ser
313 305          310          315

316 <210> SEQ ID NO: 4
317 <211> LENGTH: 316
318 <212> TYPE: PRT
319 <213> ORGANISM: Homo sapiens
321 <220> FEATURE:
322 <221> NAME/KEY: misc_feature
323 <222> LOCATION: (117)..(117)
324 <223> OTHER INFORMATION: The 'Xaa' at location 117 stands for Pro, or Ser.
326 <220> FEATURE:
327 <221> NAME/KEY: misc_feature
328 <222> LOCATION: (269)..(269)
329 <223> OTHER INFORMATION: The 'Xaa' at location 269 stands for Gly.
331 <220> FEATURE:
332 <221> NAME/KEY: misc_feature
333 <222> LOCATION: (284)..(284)
334 <223> OTHER INFORMATION: The 'Xaa' at location 284 stands for Leu.
336 <400> SEQUENCE: 4
338 Met Met Gly Leu Thr Glu Gly Val Phe Leu Ile Leu Ser Gly Thr Gln
339 1          5          10          15
342 Phe Thr Leu Gly Ile Leu Val Asn Cys Phe Ile Glu Leu Val Asn Gly
343          20          25          30
346 Ser Ser Trp Phe Lys Thr Lys Arg Met Ser Leu Ser Asp Phe Ile Ile
347          35          40          45
350 Thr Thr Leu Ala Leu Leu Arg Ile Ile Leu Leu Cys Ile Ile Leu Thr

```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 12/29/2005
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 111
Seq#:2; Xaa Pos. 111
Seq#:3; Xaa Pos. 117,269,284
Seq#:4; Xaa Pos. 117,269,284
Seq#:5; Xaa Pos. 3,7,62,96,171
Seq#:6; Xaa Pos. 3,7,62,96,171
Seq#:7; Xaa Pos. 26,79,113,167,213,294
Seq#:8; Xaa Pos. 26,79,113,167,213,294
Seq#:9; Xaa Pos. 263
Seq#:10; Xaa Pos. 263
Seq#:11; Xaa Pos. 166,183,277,308
Seq#:12; Xaa Pos. 166,183,277,308
Seq#:13; Xaa Pos. 67,150,187,289,294
Seq#:14; Xaa Pos. 67,150,187,289,294
Seq#:15; Xaa Pos. 40,156,174,188,209
Seq#:16; Xaa Pos. 40,156,174,188,209
Seq#:17; Xaa Pos. 259
Seq#:18; Xaa Pos. 259
Seq#:19; Xaa Pos. 86
Seq#:20; Xaa Pos. 86
Seq#:21; Xaa Pos. 100,101,154,172,222,282
Seq#:22; Xaa Pos. 100,101,154,172,222,282
Seq#:23; Xaa Pos. 49,80,262,274,296
Seq#:24; Xaa Pos. 49,80,262,274,296
Seq#:25; Xaa Pos. 193,197
Seq#:26; Xaa Pos. 193,197
Seq#:27; Xaa Pos. 187,273
Seq#:28; Xaa Pos. 187,273
Seq#:29; Xaa Pos. 63,127,195
Seq#:30; Xaa Pos. 63,127,195
Seq#:31; Xaa Pos. 35,90,154,170,200,212,221,294,295,297
Seq#:32; Xaa Pos. 35,90,154,170,200,212,221,294,295,297
Seq#:33; Xaa Pos. 35,162,200,217,227,240,248,276,281
Seq#:34; Xaa Pos. 35,162,200,217,227,240,248,276,281
Seq#:35; Xaa Pos. 36,228,250,288
Seq#:36; Xaa Pos. 36,228,250,288
Seq#:39; Xaa Pos. 32,109,140,152,225,240,267,295,299
Seq#:40; Xaa Pos. 32,109,140,152,225,240,267,295,299
Seq#:41; Xaa Pos. 141,143,148,172,236,252,255,270
Seq#:42; Xaa Pos. 141,143,148,172,236,252,255,270
Seq#:45; Xaa Pos. 199
Seq#:46; Xaa Pos. 199

VERIFICATION SUMMARY

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L:13 M:270 C: Current Application Number differs, Replaced Current Application No
 L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
 L:69 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:336
 L:157 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:96
 L:264 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:384
 L:300 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:816
 L:304 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:864
 L:366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:112
 L:402 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:256
 L:406 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:272
 L:455 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:48
 L:467 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:192
 L:475 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:288
 L:495 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:528
 L:563 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
 L:575 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:48
 L:583 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:80
 L:603 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:160
 L:685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:96
 L:697 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:240
 L:709 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:384
 L:721 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:528
 L:733 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:672
 L:753 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:900
 L:798 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:16
 L:810 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:64
 L:822 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:112
 L:834 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:160
 L:846 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:208
 L:866 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:288
 L:952 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:816
 L:1044 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:256
 L:1132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:528
 L:1136 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:576
 L:1160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:864
 L:1168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:930
 L:1239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:160
 L:1243 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:176
 L:1267 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:272
 L:1275 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:304
 L:1332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:240
 L:1352 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:480
 L:1360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:576
 L:1388 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:912
 L:1444 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:64
 L:1464 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:144
 L:1472 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:176
 L:1500 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:288

VERIFICATION SUMMARY

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Input Set : A:\66168-03 Sequence Listing.txt

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L:1553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:144
 L:1581 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:480
 L:1585 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:528
 L:1589 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:576
 L:1597 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:672
 L:1665 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:32
 L:1693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:144
 L:1697 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:160
 L:1701 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:176
 L:1709 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:208
 L:1818 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:816
 L:1906 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:256
 L:1955 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:288
 L:2047 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:80
 L:2173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:336
 L:2185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:480
 L:2189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:528
 L:2201 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:672
 L:2217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:864
 L:2286 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:96
 L:2298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:144
 L:2302 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:160
 L:2314 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:208
 L:2330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:272
 L:2387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:192
 L:2391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:240
 L:2439 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:816
 L:2443 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:864
 L:2447 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:912
 L:2503 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:48
 L:2507 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:64
 L:2555 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:256
 L:2559 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:272
 L:2563 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:288
 L:2645 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:624
 L:2750 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:192
 L:2856 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:576
 L:2880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:864
 L:2957 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:176
 L:2981 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:272
 L:3036 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:192
 L:3052 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:384
 L:3072 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:624
 L:3138 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:48
 L:3154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:112
 L:3174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:192
 L:3276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:144
 L:3288 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:288
 L:3304 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:480

VERIFICATION SUMMARY

DATE: 12/29/2005

PATENT APPLICATION: US/10/561,487

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Input Set : A:\66168-03 Sequence Listing.txt

Output Set : N:\CRF4\12292005\J561487.raw

L:3308 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#31 after pos.:528
 L:3316 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#31 after pos.:624
 L:3320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#31 after pos.:672
 L:3340 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#31 after pos.:912
 L:3413 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#32 after pos.:32
 L:3425 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#32 after pos.:80
 L:3441 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#32 after pos.:144
 L:3445 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#32 after pos.:160
 L:3453 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#32 after pos.:192
 L:3457 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#32 after pos.:208
 L:3477 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#32 after pos.:288
 L:3550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#33 after pos.:144
 L:3582 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#33 after pos.:528
 L:3590 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#33 after pos.:624
 L:3594 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#33 after pos.:672
 L:3598 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#33 after pos.:720
 L:3602 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#33 after pos.:768
 L:3610 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#33 after pos.:864
 L:3682 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#34 after pos.:32
 L:3714 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#34 after pos.:160
 L:3722 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#34 after pos.:192
 L:3726 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#34 after pos.:208
 L:3730 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#34 after pos.:224
 L:3734 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#34 after pos.:240
 L:3742 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#34 after pos.:272
 L:3794 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#35 after pos.:144
 L:3842 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#35 after pos.:720
 L:3846 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#35 after pos.:768
 L:3854 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#35 after pos.:864
 L:3897 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#36 after pos.:32
 L:3945 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#36 after pos.:224
 L:3949 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#36 after pos.:240
 L:3957 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#36 after pos.:272
 L:4205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#39 after pos.:96
 L:4225 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#39 after pos.:336
 L:4233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#39 after pos.:432
 L:4237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#39 after pos.:480
 L:4257 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#39 after pos.:720
 L:4265 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#39 after pos.:816
 L:4273 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#39 after pos.:900
 L:4333 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#40 after pos.:16
 L:4353 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#40 after pos.:96
 L:4361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#40 after pos.:128
 L:4365 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#40 after pos.:144
 L:4385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#40 after pos.:224
 L:4393 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#40 after pos.:256
 L:4401 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#40 after pos.:288
 L:4489 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#41 after pos.:432
 L:4493 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#41 after pos.:480

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L:4497 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:528
L:4513 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:720
L:4517 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:768
L:4521 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:816
L:4616 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:128
L:4620 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:144
L:4624 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:160
L:4640 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:224
L:4644 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:240
L:4648 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:256
L:4900 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:624
L:4992 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:192